



CRS

center for  
resource  
solutions

March 20, 2019

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California Energy Commission  
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**Docket No. 16-OIR-05: Comments of Center for Resource Solutions (CRS) on February 20, 2019 Pre-Rulemaking Amendments to the Power Source Disclosure (PSD) Program**

Mr. Scavo:

CRS appreciates this opportunity to submit comments on the February 20, 2019 Pre-Rulemaking Amendments to the PSD Program (“Draft Regulations”). Our comments are organized into overarching comments (Section II); comments that depend on the role of California’s Mandatory Reporting Regulation (MRR) in PSD, under two different general approaches (summarized in Section III and explained further in Sections IV and V); an alternative approach to PSD and Assembly Bill (AB) 1110 implementation (Section VI); detailed comments on the Draft Regulations (Section VII); and comments related to the Clean Net Short (CNS) approach (Section VIII).

**I. Background on CRS and Green-e®**

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. CRS has broad expertise in renewable energy policy design and implementation, electricity product disclosures and consumer protection, and greenhouse gas (GHG) reporting and accounting. Among others, CRS administers the Green-e programs. Green-e is the leading certification program for voluntary renewable electricity products in North America. For over 20 years, Green-e staff have worked with independent third-party auditors to annually verify renewable energy purchases in the voluntary market and ensure purchasers receive full environmental benefits and sole ownership of each megawatt-hour (MWh) of renewable energy they purchase. Verification procedures ensure there is no double counting between voluntary and compliance markets, and that other renewable energy or carbon policies do not claim any of the environmental benefits of certified renewable energy. In 2017, Green-e certified retail sales of over 60 million MWh, representing over 1.6% of the total U.S. electricity mix. In 2017, there were over 1.1 million retail purchasers of Green-e certified renewable energy, including 63,400 businesses.

**II. Overarching Comments and Recommendations**

1. CRS would like to express its strong support for § 1392(a)(1) General Provisions requiring that renewable energy credits (RECs) must be procured to claim both the fuel type and GHG emissions profile of an eligible renewable generator, and that purchases from renewables without the associated RECs must be classified as unspecified.

This provision is absolutely critical to prevent double counting, as required by AB 1110,<sup>1</sup> and ensure the integrity of retail disclosure of renewable energy.

2. Since the Draft Regulation requires that RECs be retained only for "eligible renewable resources," it is possible that retail suppliers could report delivered hydropower and other non-eligible renewable power as having the GHG emissions profile of the renewable generator without retaining the non-power attributes or RECs. In order to avoid double counting in other programs, we recommend that the regulation require suppliers to retain the non-power attributes and any RECs associated with power that is assigned the specified emissions factor of a renewable generator.
3. CRS supports § 1394(e) of the Draft Regulations requiring that private contracts not be included in power content labels (PCLs) and disclosed separately.

This avoids double claiming of generation attributes from sources serving private contracts and ensures accurate disclosure to both the default customer base and customers purchasing a specific mix of resources or from individual facilities.

### **III. Summary of comments that depend on the role of the MRR in PSD**

We believe the reason behind both the restriction on unbundled RECs and the proposed treatment of firmed-and-shaped power in the Draft Regulations has to do with the perceived role of the MRR in PSD—specifically, the interpretation that the MRR determines retail claims to emissions. Our recommendations on these two elements (recommendations 4 and 5) depend on whether this interpretation is maintained by the Commission (Approach A) or not (Approach B).

Approach A: PSD must maintain the same boundaries of delivery as the MRR or the MRR represents an accounting methodology for retail claims to emissions in California.

Approach B: PSD can use different boundaries of delivery than the MRR or the MRR does not necessarily represent an accounting methodology for retail claims to emissions in California.

Recommendations under Approach A:

4. PSD should allow unbundled RECs from within the delivery boundary.
5. Firmed-and-shaped procurements should be reported based on the substitute power in both fuel mix and GHG emissions to resolve factual discrepancy between fuel type and emissions.

This approach is inconsistent with the Renewable Portfolio Standard (RPS), and there are, in this case, double counting issues in the MRR (around renewable imports that can be used for retail delivery claims in other states based on the RECs). These recommendations are explained in more detail in Section IV below.

Recommendations under Approach B:

4. PSD should allow unbundled RECs, including unbundled imports.
5. Firmed-and-shaped procurements should be reported as renewable in fuel mix and GHG emissions.

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<sup>1</sup> See Sec. 398.4(k)(2)(E) of AB 1110.

This approach is consistent with the RPS, averts double counting issues in the MRR, provides the most flexibility for suppliers, reduces costs for customers, and is better for renewable energy development across the West. The portion of annual sales derived from unbundled REC can still be disclosed separately, as required by AB 1110.<sup>2</sup> These recommendations are explained in more detail in Section V below.

Between the two, we recommend Approach B. In other words, we recommend that the methodology for retail portfolio GHG emissions intensity in PSD be separate from the MRR. Forcing them to match will have a negative impact on either PSD or cap-and-trade, or both, and AB 1110 does not require it.<sup>3</sup> It is appropriate that the MRR, a source-based GHG accounting protocol, does not mention RECs and assigns emissions to firmed-and-shaped renewable imports, if it is not for retail claims. RECs are not required to prove renewable generation. Likewise, it is appropriate that PSD and RPS, consumption-based accounting programs for retail claims, allocate renewable power and emissions to suppliers using the common instrument in the West—RECs. In fact, they must in order to avoid double counting. We believe California needs both a source-based account of emissions (for cap-and-trade) and a consumption-based account of emissions, and they can be different, and both be accurate simultaneously for what they are.

In addition, using the MRR for PSD (or citing it as the basis for decisions regarding the approach to accounting and reporting in PSD) has implications beyond PSD. If the MRR is for retail claims, then RECs should be required for specified renewable imports to avoid double counting.<sup>4</sup> If it is not for retail claims, then the MRR does not necessarily need to reference RECs, but it should not be used as a model for PSD. In either case, unbundled RECs can be included and firmed-and-shaped emissions can be those associated with the RECs in PSD (recommendations under Approach B).<sup>5</sup>

#### **IV. Comments and Recommendations under Approach A**

4. It is unnecessary and inadvisable not to allow unbundled RECs that were generated in California or that come from facilities directly delivering into California (i.e. that were imported bundled) to be paired with unspecified or specified renewable procurements and reported as delivered renewable energy (both in terms of fuel type and emissions).

Even if it is Commission Staff's preference not to allow unbundled REC imports, presumably to establish the same boundaries for delivery in PSD as the MRR, there is no need to restrict trading within that boundary. The Commission can and should allow unbundled RECs to be reported in the power mix and GHG emissions intensities as long as the power is directly delivered in the boundary. In this case, the boundaries of PSD and the MRR would be the same.

At a minimum, we recommend allowing these specific unbundled REC procurements to be reported—meaning RECs that were generated in California or that come from facilities directly delivering into California. This would simply allow for renewable energy trading within the state, which provides

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<sup>2</sup> See Sec. 398.4(h)(7) of AB 1110.

<sup>3</sup> It simply requires that the Commission consult with the California Air Resources Board (CARB). See Sec. 398.4(k)(2)(A) of AB 1110.

<sup>4</sup> See October 5, 2018 Comments of Center for Resource Solutions (CRS) on IEMAC Meeting Materials for Sept. 21, 2018 and Draft Subcommittee Reports. Available at: <https://resource-solutions.org/document/100518/>.

<sup>5</sup> The recommendations under Approach A above should only be used if the MRR is for retail claims but cannot be amended to require RECs for specified renewable imports (in which case, it double counts).

flexibility to suppliers that may over- or under-procure (meaning it is good for long-term renewable contracts) and lowers the cost of renewable energy for customers.

Furthermore, § 1393(d)(2)(A) of the Draft Regulations, which allows publicly owned utilities (POUs) to use excess zero-GHG electricity to adjust their GHG emissions in a subsequent year, already effectively allows pairing of “unused” renewable energy generation from previous years to unspecified MWh in the GHG emissions intensity calculation. This is equivalent in effect to banking unbundled RECs. The fact that the physical power was not delivered with the attributes at the same time does not appear to affect accurate retail delivery in this case. Yet this is the rationale that has been provided by Commission Staff for both the exclusion of unbundled RECs and the treatment of firmed-and-shaped products in the GHG emissions intensity.<sup>6</sup> If this is permitted, then suppliers should be able to use unbundled RECs from within the state in the same way and trade renewable energy among themselves in a particular reporting year.

5. The treatment of firmed-and-shaped renewable imports—reported as renewable in the fuel mix based on the RECs but assigned the GHG emissions intensity of the substitute electricity delivered to a California balancing authority—clearly does not meet the requirements of AB 1110 to provide accurate, reliable, and simple to understand information.<sup>7</sup>

This is factually inaccurate disclosure. There should not be a discrepancy between fuel type and emissions in PSD. Emissions are determined by fuel type. These attributes cannot be separated in disclosure that is accurate. But also, this treatment of firmed-and-shaped products violates the state’s REC definition under the RPS,<sup>8</sup> contradicts federal guidance,<sup>9</sup> and may have negative consequences for renewable energy markets.

The proposed treatment of firmed-and-shaped products and the proposed restriction on unbundled REC procurements may also result in double counting and overreporting of emissions. If a California supplier purchasing a firmed-and-shaped product reports the emissions of the substitute generator and another entity purchasing the null power from the RE generator also reports emissions that include the substitute generator (following an accounting regime that requires that power without RECs be reported as “null,” e.g. any voluntary program or a GHG compliance program for load-serving entities [LSEs] such

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<sup>6</sup> See, for example, pages 4, 7, 8, & 12 of the October 9, 2018 AB 1110 Implementation Proposal for Power Source Disclosure, Third Version.

<sup>7</sup> See Sec. 398.1(b) of AB 1110.

<sup>8</sup> RECs are defined as including “all renewable and environmental attributes” (CAL. PUB. UTIL. CODE § 399.12(h)(2)) and “shall be counted only once for [...] verifying retail product claims in this state or any other state” (CAL. PUB. UTIL. CODE § 399.21(a)(2)). California’s REC definition does not exclude the emissions associated with generation in the case of firmed and shaped procurements. It does not specify that inclusion of these attributes in the REC requires a power contract from the same facility. This treatment of firmed and shaped renewable imports may therefore infringe on the legal rights and claims of REC owners, under California law, and per the terms of use of the Western Renewable Energy Generation Information System (WREGIS) (See WREGIS Operating Rules [July 15, 2013]. Section 2, pg. 2, 4-5) and bilateral contracts for power and attributes. This would have direct implications for energy contracts, and parties may have to go to court to defend their contractual rights.

<sup>9</sup> Guidance from the U.S. Federal Trade Commission (FTC) states that there is no meaningful distinction between a bundled and an unbundled procurement with respect to customer expectations about renewable energy delivery and consumption, and that businesses may make unconditional claims when they purchase RECs to match their use of non-renewable energy. See 16 C.F.R. § 260.15(a) and (d). And US Federal Trade Commission (FTC). (2012). *Guides for the Use of Environmental Marketing Claims; Final Rule*. 260.15(a) and (d).

as the carbon-free power mandate currently proposed in Washington<sup>10</sup>), then there is double counting. We see the same overreporting risk where California suppliers purchase unbundled RECs but are unable to report the GHG emissions associated with the renewable generator in PSD while an entity purchasing null power from that renewable generator potentially reports emissions from the same non-renewable resources.

If the Commission chooses Approach A, we recommend that it correct the current discrepancy between fuel mix and emissions by assigning firmed-and-shaped procurements both the fuel type and emissions of the substitute power. This would be inconsistent with the RPS, and less defensible than treating them as fully renewable in terms of the realities of renewable energy markets (under Approach B, see Section V below), but still an improvement upon the treatment in the Draft Regulations.

Ideally, the accounting rules for retail claims should be aligned between the RPS, PSD, and the MRR, if the MRR is for retail claims. If unbundled RECs and firmed-and-shaped renewables are considered a renewable energy delivery for retail claims under the RPS, then they should be under PSD as well—in terms of both fuel type and emissions. The state must either change the RPS or recognize it in PSD. If both the RPS and the MRR reflect retail claims (one for fuel type and the other for emissions) and they disagree on unbundled RECs and firmed-and-shaped imports, they must be reconciled—one of them must be changed.<sup>11</sup> However, since the scope of this proceeding does not include changes to either the RPS or MRR, we make the above recommendations (4 and 5) for PSD where the MRR is for retail claims (Approach A).

## **V. Comments and Recommendations under Approach B**

4. In addition to unbundled RECs that were generated in California or imported bundled, which should be allowed regardless, the Commission can allow unbundled imports.

This would not result in double counting. The renewable attributes—fuel type and emissions profile—reside only in the REC for retail delivery claims. There is no physical delivery of renewable electricity, and contracts for power do not somehow more accurately represent the sources of electricity and attributes that can be claimed by consumers. There is no distinction between bundled and unbundled renewable energy in terms of attributes and retail claims, and unbundling is not equivalent to shuffling or laundering of emissions. While there may not be requirements to report retail emissions in other states, power without the REC (null power) cannot be reported as renewable or zero-emissions in any other regulatory or voluntary program that exists. In fact, using RECs to account for delivered emissions from renewables in the West is the best way to avoid double counting with other states. By requiring that RECs and power must be procured bundled, never unbundled and in fact delivered at the same time in order to convey the GHG profile of renewable generator for a retail claim, the Commission is simply choosing a renewable energy policy that, first, is inconsistent with the RPS—Portfolio Content Category (PCC) 3 RPS renewable energy does not show up at all in PSD under the Draft Regulations—and second, is very restrictive and does not take advantage of trading and market efficiencies that reduce costs,

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<sup>10</sup> See Washington Senate Bill (SB) 5116.

<sup>11</sup> Though CARB Staff deny that the RPS Adjustment in the cap-and-trade regulation represents a recognition of firmed-and-shaped imports as renewable, or that it is intended to align cap-and-trade with what is considered to be a renewable import under RPS—rather, they characterize it as financial adjustment—the RPS Adjustment nevertheless has the *effect* of aligning cap-and-trade with the RPS by adjusting compliance obligations to diverge from would otherwise be determined by the MRR.

produce economic benefits for the state, and advance the development of renewable energy across the region.<sup>12</sup>

5. We recommend that firmed-and-shaped procurement be reported as fully renewable, in terms of both fuel type and emissions.

There is no accounting problem in this case.<sup>13</sup> In addition to correcting the factual discrepancy produced by the proposed treatment in the Draft Regulations and preventing the double counting/overreporting issue that arises when renewable attributes cannot be reported in PSD (both described in Section IV above), treating firmed-and-shaped procurements as fully renewable would be consistent with the RPS and the state's REC definition under the RPS. Accounting should be consistent between PSD and RPS based on what each program is intended to do, disclose delivered power attributes and deliver renewable power attributes, respectively.<sup>14</sup> Though firmed-and-shaped imports and directly delivered renewables are categorized in different PCCs, both nevertheless represent delivered renewable energy to customers under the RPS. Consistency with the RPS is important for consumer understanding. A PCL that shows a different renewable energy percentage than the supplier's RPS compliance amount is confusing to both customers and state legislators<sup>15</sup>.

## **VI. Alternative Approach to PSD**

6. The most ideal solution for PSD in California, and the region, is to establish common rules across the West using an all-generation certificate tracking system.

WREGIS could be transformed into an all-generation tracking system and used for PSD in the same way that the New England Power Pool Generation Information System (NEPOOL-GIS), the PJM Generation Attribute Tracking System (PJM-GATS), and the New York Generation Attribute Tracking System (NYGATS) are all used currently in the Northeast and Mid-Atlantic states. These systems facilitate the most precise accounting of delivered power, including residual mixes, in their regions. They also serve states that have cap-and-trade programs, and we have provided analysis to the Regional Greenhouse Gas Initiative (RGGI) for how it can use all generation tracking systems to account for imports. All-generation certificate tracking would ensure no double counting for retail electricity products across the WREGIS footprint and would not necessarily affect source-based accounting for cap-and-trade. We believe this is still an option for the Commission.

CRS was the lead contractor with the Commission on the design of WREGIS, led the committee that developed the operating procedures, and continues to serve on the Stakeholder Advisory Committee.

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<sup>12</sup> The economic benefits of interstate unbundled REC trading and the benefits to renewable energy development have been studied and documented. See, for example: A.P. Perez, E.E. Sauma, F.D. Munoz, and B.F. Hobbs, "The Economic Effects of Interregional Trading of Renewable Energy Certificates in the WECC," *The Energy Journal*, 37(4), 2016, 267-296. Executive summary available at: <https://www.iaee.org/ej/ejexec/ExecSum14-177.pdf>.

<sup>13</sup> See pages 7-8 of CRS's October 25, 2018 comments on the October 9, 2018 Assembly Bill 1110 Implementation Proposal for Power Source Disclosure, Third Version.

<sup>14</sup> Compliance value under the RPS is delivered renewable attributes, by definition; the RPS is a percentage of sales, a percent of what is delivered to end use customers (CAL. PUB. UTIL. CODE § 399.11(a) and (e)(1)).

<sup>15</sup> See, for example, minute 2:27-2:28 of the July 2, 2018 Joint Legislative Hearing on *Decarbonizing the Electric Grid: Tracking the GHGs in Our Electrons*. Video recording available here: <https://www.senate.ca.gov/media/joint-hearing-joint-legislative-committee-emergency-management-assembly-select-committee-natural-disaster-response-re-20180712/video>.

We can work with the Commission and program administrators to pursue all-generation tracking in WREGIS.

## **VII. Detailed Comments and Recommendations on Draft Regulations**

7. The Draft Regulations propose a new REC definition in § 1391 that does not match the state's existing definition under the RPS, CAL. PUB. UTIL. CODE § 399.12(h). We recommend consistency or a simple reference to the existing definition in the Draft Regulations to avoid confusion.
8. The footnote describing unbundled RECs on the Proposed PCL Template does not accurately or sufficiently communicate what they are. We recommend that PCL footnote language for unbundled REC procurements be revised and a brief, clear description be provided or one that matches the definition of "Unbundled REC" that is provided in § 1391 of the Draft Regulations.

The definition of Unbundled REC that is provided in § 1391 of the Draft Regulations is clearer and more accurate than the footnote language on the Proposed PCL Template. Alternatively, the following language can be considered: "A renewable energy credit (REC) is a certificate of proof that one unit of electricity was generated and delivered by an eligible renewable energy resource, and it includes all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource. 'Unbundled' RECs may be procured by electricity suppliers separately from the electricity associated with those credits."

9. CRS supports the prominence of the disclosure related to the percentage of unbundled RECs on the PCL Template.

The more prominent and clear the information about procurement is on the PCL, the better for customers.

10. There appear to be a number of problems with footnotes on the Proposed PCL Template, including missing, misplaced, and mis-numbered footnotes. We recommend these errors be corrected and the PCL Template be re-docketed.

## **VIII. Comments related to the CNS approach**

Southern California Edison (SCE) and Pacific Gas & Electric (PG&E) continue to submit the CNS methodology for consideration as the methodology for retail portfolio GHG intensity calculations in PSD. CRS submitted comments on the CNS approach on October 3, 2017.<sup>16</sup> We believe those comments remain relevant to their continued push for CNS in PSD. Ultimately, since RECs are not required as a part of demonstrating an LSE's share of GHG-free power from renewables delivered in a given hour under the CNS approach, there can be double counting as both the physical power and REC can be used to report delivery/consumption of zero-emissions power in different programs. This double counting is our primary concern with utilizing the CNS method for PSD.

Please let me know if we can provide any further information or answer any other questions.

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<sup>16</sup> See CRS Comments on PG&E's Supplemental GHG Metric Methodology, TN# 221389 in Docket 16-OIR-05. Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=221389>.

Sincerely,

A handwritten signature in black ink, appearing to be 'T. Jones', written in a cursive style.

Todd Jones  
Director, Policy and Climate Change Programs